



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0551; Product Identifier 2018-NM-023-AD; Amendment 39-19485; AD 2018-22-12]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc., Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes; Model CL-600-2D15 (Regional Jet Series 705) airplanes; Model CL-600-2D24 (Regional Jet Series 900) airplanes; and Model CL-600-2E25 (Regional Jet Series 1000) airplanes. This AD was prompted by reports of damage to the protective coating and corrosion on the piston/axle of the main landing gear (MLG), caused by friction between the inboard axle sleeve and the axle thrust face. This AD requires revising the maintenance or inspection program, as applicable, to incorporate a detailed inspection of the MLG piston/axle for damage to the protective coating and for corrosion. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; Widebody Customer Response Center North America toll-free telephone 1-866-538-1247 or direct-dial telephone 1-514-855-2999; fax 514-855-7401; email ac.yul@aero.bombardier.com; Internet <http://www.bombardier.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0551.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0551; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Darren Gassetto, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York

ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7323; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc., Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes; Model CL-600-2D15 (Regional Jet Series 705) airplanes; Model CL-600-2D24 (Regional Jet Series 900) airplanes; and Model CL-600-2E25 (Regional Jet Series 1000) airplanes. The NPRM published in the Federal Register on July 6, 2018 (83 FR 31504). The NPRM was prompted by reports of damage to the protective coating and corrosion on the piston/axle of the MLG, caused by friction between the inboard axle sleeve and the axle thrust face. The NPRM proposed to require revising the maintenance or inspection program, as applicable, to incorporate a detailed inspection of the MLG piston/axle for damage to the protective coating and for corrosion.

We are issuing this AD to address damage to the protective coating and corrosion found on the piston/axle of the MLG, caused by friction between the inboard axle sleeve and the axle thrust face, which could cause the axle to separate from the piston/axle, and ultimately lead to collapse of the landing gear during ground maneuvers or upon landing.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2017-38, dated December 20, 2017 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Bombardier, Inc., Model CL-600-2C10 (Regional

Jet Series 700, 701, & 702) airplanes; Model CL-600-2D15 (Regional Jet Series 705) airplanes; Model CL-600-2D24 (Regional Jet Series 900) airplanes; and Model CL-600-2E25 (Regional Jet Series 1000) airplanes. The MCAI states:

There have been reports of damage to the protective coating and/or corrosion on the piston/axle of the Main Landing Gear (MLG). The damage to the protective coating was caused by friction between the inboard axle sleeve and the axle thrust face. If not corrected, this condition can cause the axle to separate from the piston/axle [and consequent collapse of the landing gear during ground maneuvers or upon landing].

This [Canadian] AD mandates the incorporation of a new maintenance task in order to perform a [detailed] visual inspection of the piston/axle of the MLG to prevent the axle separation from the piston/axle.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0551.

Comments

We gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA's response to each comment.

Support for the NPRM

The Air Line Pilots Association, International and Endeavor Air stated their support for the proposed AD.

Request to Refer to Certain Revised Service Information

Endeavor Air noted that Bombardier, Inc. has issued certain revised service information and requested that the proposed AD be updated to reference the revised service information.

We agree with the commenter's request. We have determined the revised service information should be referenced in regards to calculating the time since piston/axle entry into service, since operators might have done the latest inspection, restoration, or repair using the revised service information. We have updated paragraph (h) of this AD to refer to the revised service information and reorganized paragraph (h) of this AD for consistency.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

Related Service Information under 1 CFR part 51

Bombardier, Inc. has issued CRJ Series Regional Jet Temporary Revision (TR) MRB-0059, dated March 20, 2015. The service information describes an airworthiness limitation task for a detailed inspection for damage to the protective coating and for corrosion on the piston/axle of the MLG. This service information is reasonably available

because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 530 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

We have determined that revising the maintenance or inspection program takes an average of 90 work-hours per operator, although we recognize that this number may vary from operator to operator. In the past, we have estimated that this action takes 1 work-hour per airplane. Since operators incorporate maintenance or inspection program changes for their affected fleet(s), we have determined that a per-operator estimate is more accurate than a per-airplane estimate. Therefore, we estimate the total cost per operator to be \$7,650 (90 work-hours x \$85 per work-hour).

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products

identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA

amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2018-22-12 Bombardier, Inc: Amendment 39-19485; Docket No. FAA-2018-0551; Product Identifier 2018-NM-023-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc., Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes, serial numbers 10002 and subsequent; Model CL-600-2D15 (Regional Jet Series 705) airplanes and Model CL-600-2D24 (Regional Jet Series 900) airplanes, serial numbers 15001 and subsequent; and Model CL-600-2E25 (Regional Jet Series 1000) airplanes, serial numbers 19001 and subsequent; certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 32, Landing gear.

(e) Reason

This AD was prompted by reports of damage to the protective coating and corrosion found on the piston/axle of the main landing gear (MLG), caused by friction between the inboard axle sleeve and the axle thrust face. We are issuing this AD to address such damage, which could cause the axle to separate from the piston/axle, and ultimately lead to collapse of the landing gear during ground maneuvers or upon landing.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Maintenance or Inspection Program Revision

Within 30 days after the effective date of this AD: Revise the maintenance or inspection program, as applicable, by incorporating CRJ Series Regional Jet Temporary Revision (TR) MRB-0059, dated March 20, 2015. The applicable maintenance or inspection program revision required by this paragraph may be done by inserting a copy of CRJ Series Regional Jet TR MRB-0059, dated March 20, 2015, into the maintenance requirements manual (MRM). When the information in CRJ Series Regional Jet TR MRB-0059, dated March 20, 2015, has been included in the general revisions of the MRM, the general revisions may be inserted in the MRM, and this TR may be removed, provided the relevant information in the general revision is identical to that in CRJ Series Regional Jet TR MRB-0059, dated March 20, 2015. The initial time for the task is at the applicable time specified in figure 1 to paragraphs (g) and (h) of this AD. Information used for determining the entry into service date can be found in paragraph (h) of this AD.

Figure 1 to paragraphs (g) and (h) of this AD – Compliance Time Requirements

Time since piston/axle entry into service	Compliance time to perform initial inspection task
More than 48 months since entry into service, as of the effective date of this AD	Within 12 months from the effective date of this AD
More than 24 months but less than or equal to 48 months since entry into service, as of the effective date of this AD	Within 24 months from the effective date of this AD but before reaching 60 months total piston/axle time in-service
Less than or equal to 24 months since entry into service, as of the effective date of this AD	Within 36 months from the effective date of this AD but before reaching 48 months total piston/axle time in-service

(h) Information for Calculating Time Since Piston/Axle Entry into Service Date

The entry into service date (first column of figure 1 to paragraphs (g) and (h) of this AD) can be calculated from the date of the latest inspection, restoration, or repair accomplished as specified in the service information listed in paragraphs (h)(1) through (h)(3) of this AD, as applicable.

(1) Inspected as specified in one of the following Bombardier Service Bulletins specified in paragraphs (h)(1)(i) through (h)(1)(iv) of this AD.

(i) Bombardier Service Bulletin 670BA-32-048, dated August 29, 2014.

(ii) Bombardier Service Bulletin 670BA-32-048, Revision A, dated September 5, 2014.

(iii) Bombardier Service Bulletin 670BA-32-048, Revision B, dated September 2, 2015.

(iv) Bombardier Service Bulletin 670BA-32-048, Revision C, dated July 11, 2018.

(2) Restored as specified in Bombardier Task Number 320100-210, of the Bombardier CRJ Series Regional Jet MRM, Part 1, CSP B-053.

(3) Repaired as specified in one or more of the Bombardier repair engineering orders (REO) specified in paragraphs (h)(3)(i) through (h)(3)(v) of this AD.

(i) Bombardier REO 670-32-11-313, Revision A, dated March 18, 2014.

(ii) Bombardier REO 670-32-11-361, dated July 30, 2014.

(iii) Bombardier REO 670-32-11-361, Revision A, dated May 31, 2018.

(iv) Bombardier REO 698-32-11-008, dated July 30, 2014.

(v) Bombardier REO 698-32-11-008, Revision A, dated May 31, 2018.

(i) No Alternative Actions or Intervals

After the maintenance or inspection program has been revised, as required by paragraph (g) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions or intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (j)(1) of this AD.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal

inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(k) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2017-38, dated December 20, 2017, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0551.

(2) For more information about this AD, contact Darren Gassetto, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7323; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (l)(3) and (l)(4) of this AD.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) CRJ Series Regional Jet Temporary Revision (TR) MRB-0059, dated March 20, 2015.

(ii) [Reserved]

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; Widebody Customer Response Center North America toll-free telephone 1-866-538-1247 or direct-dial telephone 1-514-855-2999; fax 514-855-7401; email ac.yul@aero.bombardier.com; Internet <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on October 25, 2018.

Michael Kaszycki,
Acting Director,
System Oversight Division,
Aircraft Certification Service.

[FR Doc. 2018-24003 Filed: 11/6/2018 8:45 am; Publication Date: 11/7/2018]